



United States Department of Agriculture,
OFFICE OF THE SECRETARY.

VIVISECTION IN THE DISTRICT OF COLUMBIA.

The following letter was addressed by the Acting Secretary, Dr. Charles W. Dabney, jr., to Hon. James McMillan, chairman of the Committee on the District of Columbia, to which had been referred a bill on the subject of vivisection:

Washington, D. C., May 16, 1896.

Hon. JAMES McMILLAN,
*Chairman Committee on District of Columbia,
United States Senate.*

DEAR SENATOR: I have the honor to invite your attention to certain provisions of the bill S. 1552 and of a substitute which I am informed the Committee on the District of Columbia has decided to report favorably. The bill is entitled "A bill for the further prevention of cruelty to animals in the District of Columbia." The principal purpose of the bill as disclosed by its several sections is to restrict and prohibit those experiments upon animals without which it is impossible to obtain the facts required for the advancement of the biological sciences, and particularly for understanding the nature of disease and discovering the best means for its prevention and cure. As the Bureau of Animal Industry of this Department is charged by law with the duty of investigating and controlling animal diseases, and as it has made and is making more extensive investigations of said diseases than any other institution in the United States, the work of said Bureau would be directly and seriously affected by legislation such as is proposed in this measure. The bill, while ostensibly local legislation, would affect principally the work of the Executive Departments, and more particularly the scientific investigations of the Department of Agriculture.

1. The bill provides that hereafter no person shall perform on a living animal any experiment calculated to give pain to such animal, and it makes any person guilty of an offense who performs or takes part in any such experiment which in any way contravenes the provisions of this bill, and for such offense, if the first, he is liable to the excessive penalty of \$150 fine, or if the second offense he is liable to a fine of \$300 or to imprisonment for a period not exceeding six months. These extreme penalties would discourage investigators, they would cause hesitation and delay in the performance of necessary experiments, for no one would enter upon a series of researches until he had satisfied himself that he could carry them through without even a technical violation of the act, and that he could satisfy even unfriendly inspectors that there was no technical violation. Such hesitation and delay is fatal to experimental work of the character performed in this De-

partment. It often requires months, sometimes years, to find an outbreak of disease of the right type, and with the affected animals at the proper stage, to yield results to the investigator. If it is a contagious disease, the experimental animals must be exposed to or inoculated with the liquid excretions or tissues of the affected individual; and this must be done under a variety of conditions. Such material is perishable and when found must be used at once; the experiments for which it is suitable must be immediately planned and executed, otherwise the valuable material is lost; hence the desirability of leaving investigators free from unnecessary restrictions and of encouraging them to their best efforts by recognizing their valuable contributions to the cause of humanity. The effect of this section would be to place experimentation upon animals under the ban of the law, to put a stigma upon it, and to cause those engaged in such researches to expend a large part of their energy and ability to avoid infraction of the numerous restrictions.

2. It is provided in section 2, Paragraph a, that such experiment must be performed with a view to the advancement *by new discovery* of physiological knowledge, or of knowledge which will be useful for saving or prolonging life or alleviating suffering. That is to say, it forbids all experimentation to confirm the results obtained by others, or to determine whether their results are exactly accurate, or whether such conclusions apply under the conditions which obtain in this country. This provision at once prohibits a large part of the necessary experimental work of this Department and would seriously cripple the remainder. Every experiment becomes an offense which does not lead to an immediate practical result. It so happens, however, that no one experiment can give such results except in extraordinary cases. Science is built up by degrees. We progress a step at a time, and many experiments must be made to determine the facts in the case before we can foresee the results. If the experimenter must stop to consider whether he can demonstrate to the satisfaction of a court that each individual experiment was "performed with a view to the advancement by new discovery of physiological knowledge, or of knowledge which will be useful for saving or prolonging life or alleviating suffering," it is not likely that he will accomplish much by his work.

3. "The experiment must be performed by a person holding such license from the Commissioners of the District of Columbia as in this act mentioned." The substitute bill adds the words "or by a duly authorized medical officer of the Government of the United States or of the District of Columbia." The provision in each bill is objectionable. The first-mentioned bill makes the work of this Department dependent upon the action of the Commissioners of the District of Columbia and would allow these Commissioners to dictate as to the persons who should be employed in this scientific work. The substitute bill allows experiments to be performed by a duly authorized medical officer of the Government of the United States without license. This would still exclude a large proportion of our men engaged in experimental work, who, while graduates in science, and perfectly competent, could not be considered medical officers. It appears from an examination of the records that some of our best men in the past would not have been allowed to serve under this provision.

4. The bill provides that "notwithstanding anything in this act contained, no experiment calculated to give pain shall be performed on a dog or cat, except upon such certificate being given as in this act mentioned, stating, in addition to the statements hereinbefore required to be made in such certificate, that for reasons specified in the certificate the object of the experiment will be necessarily frustrated unless it is performed on an animal similar in constitution and habits to a cat or dog, and no other animal is available for such experiment; and an ex-

periment calculated to give pain shall not be performed on any horse, ass, or mule, except on such certificate being given as in this act mentioned; that the object of the experiment will be necessarily frustrated unless it is performed on a horse, ass, or mule, and that no other animal is available for such purpose."

Section 7 provides "that any application for a license under this act, and for a certificate to be given as in this act mentioned, must be signed by three physicians duly licensed to practice and actually engaged in practicing medicine in the District of Columbia, and also by a professor of physiology, medicine, anatomy, medical jurisprudence, materia medica, or surgery in the medical department of any duly established reliable school or college in the District of Columbia: *Provided*, That when any person applying for a certificate under this act is himself one of the persons authorized to sign such certificate, the signature of some other of such persons shall be substituted for the signature of the applicant.

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"A copy of any certificate under this section shall be forwarded by the applicant to the Commissioners of the District, but shall not be available until one week after a copy has been so forwarded.

"The Commissioners of the District may at any time disallow or suspend any certificate given under this section."

These provisions prevent the use of five species of animals in experiments, except upon special certificate being given. The form of this certificate and the manner in which it is to be obtained or given, are indefinite, and it can not be clearly understood from the language of the bill what kind of a certificate is intended. The fact that an application for a certificate must be signed by three physicians, and by a professor in a medical college, makes the work of an Executive Department of the United States Government dependent again in this instance not only upon the Commissioners of the District but upon the action of individuals in the District of Columbia, who have no connection either with the United States Government or the District Government. Such a provision is, I believe, unprecedented in legislation affecting the Executive Departments.

The language quoted makes it plain that a certificate must be given for each experiment, or certainly for each series of experiments made upon any of the animals mentioned. As these certificates are not available until one week after a copy has been forwarded to the Commissioners of the District, experiments upon these animals are practically prohibited. As before explained, experiments can not be planned or performed until the material to be used in such experiments is obtained, and such material being perishable, a delay of a week would lead to its total loss, and thus prevent the experiment being carried out. This refers to experiments with contagious diseases or with animal parasites, which are the principal ones conducted under the direction of the Bureau of Animal Industry.

All investigations concerning the diseases of horses, asses, and mules would practically be stopped by the proposed legislation and the testing of horses with mallein to determine if they are affected with glanders would only be possible after a week's delay to obtain a certificate. Glanders is one of the diseases which it is the duty of the Bureau of Animal Industry, in cooperation with the Commissioners of the District of Columbia, to eradicate from the District. If a suspected horse is found it should be tested at once. A delay of a week gives an opportunity for the escape of the animal from supervision, and is under any circumstances a hardship to the owner as well as a peril to the people and horses exposed to the affected animal. Efforts to control contagious diseases must be prompt and vigorous if they are expected to bring success. Such legislation as is proposed in the bills mentioned would make the eradication of glanders impossible.

5. It is provided in section 4 of the substitute bill that a license shall not be granted to any person under the age of twenty-five years, unless he be a graduate from a medical college, duly authorized to practice medicine in the District of Columbia.

This provision effectually excludes from experimentation any graduate in science under twenty five years of age, unless he is duly authorized to practice medicine in the District of Columbia. It would at once stop some of the experiments now in progress, and if it had been enforced in past years would have prevented a large proportion of our scientific employees from doing this class of work. Taken in connection with Paragraph b of section 2, which provides that experiments must be performed by persons holding a license from the Commissioners of the District, or by a duly authorized medical officer of the Government of the United States or of the District of Columbia, it is readily seen that young men, graduates in zoology, or in other collateral sciences, could not make experiments even if they were competent and in the service of an Executive Department of the Government.

6. The bill also provides that the Commissioners of the District may direct any person performing such experiments under this act from time to time to make reports to them of the result of such experiments, in such form and with such details as the said Commissioners may require. The substitute bill makes this report cover the methods employed as well as the results of the experiments. This provision is objectionable, because it makes the employees of an Executive Department subject to the directions of the Commissioners of the District in making their reports. It permits reports to be called for before the investigations are completed, and the official work of these experts might be stopped at any time by a demand from the Commissioners for a report as to the methods being employed and the results of the experiments.

I would respectfully suggest that it is improper, and not in accordance with precedent, for the employees of an Executive Department of the Government to report directly to the Commissioners of the District. Their report should be made to the head of the Department, and if any report is to be made to the Commissioners it should be made by, or transmitted through, the head of the Department. Even this would be objectionable, as the work of the Departments should not in any way be subject to or dependent upon the local authorities.

7. It is provided in section 6 "that the Commissioners of the District shall cause all registered places to be from time to time visited by inspectors, without previous notice, for the purpose of securing compliance with the provisions of this act, and shall appoint and authorize an agent of the Washington Humane Society to make such inspection, and may also appoint such special inspectors as they may think fit, either permanently or temporarily, who may be willing to act as such inspectors gratuitously."

The substitute bill provides "that the President of the United States shall cause all places where experiments on living vertebrate animals are carried on in the District of Columbia to be from time to time visited and inspected, without previous notice, for the purpose of securing compliance with the provisions of this act, and to that end shall appoint four inspectors, who shall serve without compensation, and who shall have authority to visit and inspect the places aforesaid, and who shall report to the President of the United States from time to time the results of their observations therein, which shall be made public by him."

It must be plain that the results of all these limitations and restrictions and of this espionage will be the prevention of scientific research rather than its regulation. As long as this Department is directed by Congress to make investigations of animal diseases, and to provide for their suppression and control, the Department

should be left free to carry on such work in such manner as may seem best to the Secretary of Agriculture in order to attain the end in view. The Department must always be under the direction of responsible officers who may be called upon by the President at any time for information, and a board of inspection composed of persons not in the Government service and who serve gratuitously is not needed and would not be in the interest of efficient service.

8. An apparent concession is made in section 2, Paragraph c, which provides "that in so-called inoculation experiments or tests of drugs or medicines, the animal need not be anesthetized nor killed afterward, nor in tests of surgical procedure need animals be kept completely anesthetized during the process of recovery from the surgical operation." This concession is, however, apparent rather than real. The investigator remains subject to all the other limitations of the bill: (1) If not a duly authorized medical officer of the Government of the United States or of the District of Columbia, he must first obtain a license (sec. 2, b.) (2) His application for a license must be signed by three physicians duly licensed to practice medicine and actually engaged in practicing medicine in the District of Columbia, also by a professor of physiology, medicine, anatomy, medical jurisprudence, *materia medica*, or surgery, in the medical department of any duly established reliable school or college in the District of Columbia (sec. 7). (3) The Commissioners may require the place where the experiments are made to be registered (sec. 3). (4) If under twenty-five years of age, and not duly authorized to practice medicine in the District of Columbia, he can not obtain a license (sec. 4). (5) He must, if authorized to experiment at all, confine his experiments to the advancement by *new discovery* of physiological knowledge or of knowledge which will be useful for saving or prolonging life or alleviating suffering (sec. 2, a). (6) If the experiment is to be made upon a dog, cat, horse, ass, or mule, a certificate must be given (it is not specified by whom) stating in addition to certain other statements that for specified reasons the object of the experiment will be necessarily frustrated unless it is performed on an animal similar in constitution to a cat, dog, horse, ass, or mule and that no other animal is available for such purpose (sec. 2, Par. e, 3d part). (7) Any application "for a certificate to be given as in this act mentioned must be signed by three physicians duly licensed to practice and actually engaged in practicing medicine in the District of Columbia, and also by a professor of physiology, medicine, anatomy, medical jurisprudence, *materia medica*, or surgery in the medical department of any duly established reliable school or college in the District of Columbia: *Provided*, That when any person applying for a certificate under this act is himself one of the persons authorized to sign such certificate, the signature of some other of such persons shall be substituted for the signature of the applicant." (8) Such certificate shall not be available until one week after a copy has been forwarded to the Commissioners of the District (sec. 7). (It is not stated to whom the application for this certificate shall be made). (9) The investigator must hold himself ready to report at any time to the Commissioners of the District both the methods employed and the results of the experiments in such form and with such details as the said Commissioners may require (sec. 5). It makes no difference how premature the report may be, or how damaging to the investigator to publish it before the results are completed, there is no recourse. (10) The investigator, his animals, methods and experiments are to be subject to the constant inspection and espionage of four inspectors to be appointed by the President, who shall serve without compensation, and who shall report to the President the results of their observations (sec. 6).

It can hardly be supposed that a scientific man could master all of these requirements and limitations of the law without embarrassment and injury to his

work, or that he could conduct a series of experiments to a successful issue without contravening some of them and making himself liable to the extreme penalties provided for such an offense. The assertion that the effect of either the original bill or the substitute will be simply to regulate experiments and prevent abuses are absurd in the light of an analysis of the provisions. The effect will be practically prohibitive, and there is good reason to believe that this is the result aimed at by those who drafted the bills.

It appears that this bill, S. 1552, was formulated by the anti-vivisection committee of the Washington Humane Society (Annual Report, 1895, p. 24) and I am informed that a substitute bill has more recently been proposed by the said anti-vivisection committee. An examination of the proposed substitute does not, however, disclose any material modification of the provisions existing in the original bill. Both have evidently been drawn by persons hostile to scientific investigations which must be made through experimentation upon animals. The sentiment of the society which procured the drafting of these bills is well summarized in the report of its president for the year 1894. He said:

The subject of vivisection [experiments upon animals] has been frequently before your executive committee during the past year, and but one sentiment has been expressed, viz, that of utter abhorrence and condemnation of the inhuman practice which, according to the oft-expressed opinion of the best physicians and surgeons, is of no practical value to science or medicine. (P. 18.)

It is not surprising that people holding such views should endeavor to graft them upon the legislation of the country, and we must bear in mind the fact that those who drafted these bills are hostile to experimentation and desire to abolish rather than to regulate it.

The investigations which the Bureau of Animal Industry has made have been so successful as to attract the attention of the scientific world, and they have required constant experimentation upon animals. Some of these experiments have been painful to the animals operated upon, but they have been in charge of scientific and humane persons who have exerted themselves to prevent any unnecessary suffering. Such experiments which are intended to supply the knowledge required for protecting our domestic animals from disease and for securing a food supply from them uncontaminated by disease, and which also contribute to the prevention and cure of human maladies, are less subject to the charge of cruelty, even though they cause pain, than are the ordinary practices of dishorning, emasculation, branding, and slaughtering, all of which are countenanced for economic reasons and cause more pain than do scientific experiments. So long as we admit that an animal may be caused to suffer the intense pain of castration in order that it may be more economically raised and better suited for the service of man or for the production of edible meat, so long as we permit millions of delicate calves to be burned with a red-hot iron upon their sensitive skins in order that they may be identified, and so long as we admit that animals may be killed by painful processes to supply us with food, it is inconsistent to say that they can not be used in experiments necessary for the advancement of knowledge, the relief of suffering, and the saving of property and life.

The first investigations of this kind which this Department was directed by Congress to make related to the diseases of swine, and these investigations have been continued until those diseases which cause the principal losses are well understood and can be controlled by the application of proper measures.

The Bureau of Animal Industry was established principally to avert the great danger which threatened our cattle industry from the existence on our territory of that cattle plague known as the contagious pleuro-pneumonia of bovine animals. Other countries had struggled with it in vain, but it had never up to that

time been eradicated from any country in which it had gained a considerable distribution. The nature of the disease and the best methods of controlling it were imperfectly understood. The experiments made here upon animals gave sufficient information, however, to enable those charged with the work to mark out a systematic and scientific plan of operations which led to the complete eradication of the disease in less than five years. Although four years have passed since this work was completed, the predictions of the scientists have been fulfilled to the letter, and no cases of the disease have been found during that time. Previous to this work being undertaken the disease had existed constantly and extensively for more than forty years, and many persons had become so accustomed to it that they freely predicted its immediate reappearance even if it was stamped out.

An illustration of the absolute necessity of experiments upon animals to settle contested questions relating to disease may be drawn from the existing restrictions of the British Government on the American cattle trade. Although there has been no pleuro-pneumonia in this country for over four years, the British inspectors frequently condemn our cattle as being affected with that disease. The American inspectors and many European veterinarians hold that the disease actually discovered is ordinary pneumonia arising from exposure during the ocean voyage. How then can this difference of opinion between the British and American officers be settled? Not by clinical observation, not by discussion, not by diplomacy, for all of these have been tried. A scientific and incontestable demonstration could be made by exposing healthy cattle to those said to be affected with contagious pleuro-pneumonia. This would be a final and unanswerable test, but no such test can be secured. They have limited experimentation upon animals in Great Britain by law. Objections have been raised to such an experiment, and this question can not be brought to a final issue. If the bill under discussion should unfortunately become a law, an experiment could not be made at the seat of the United States Government to settle this important question, even should it become possible for other reasons to make the experiment here. The experiment would be calculated to give pain, it would not be an inoculation experiment, or a surgical procedure, and, consequently, it would be necessary, according to this bill, to keep the animals in the experiment, say twenty head of cattle, completely under the influence of ether or chloroform for the three or four weeks during which the animals might feel more or less pain. Such a requirement is absurd and impossible of fulfillment.

This is not an unusual or overdrawn case. It is only an illustration of contested or unsolved questions frequently coming before this Department for solution, and which it is of the greatest importance to the agricultural industry to have settled reliably and permanently.

Another great work which the Bureau has done by experimenting upon animals is the elucidation of the nature, the mode of dissemination, and the means of preventing the disease known as Texas fever of cattle. This disease was causing enormous losses to farmers by death of their stock, was demoralizing the cattle industry of a number of Western States and Territories, and was causing such fatality among cattle enroute to foreign countries that the propriety of admitting our animals was questioned, and insurance during the summer months was advanced to 10 per cent of the value of the animals. Now all of this has been changed. Outbreaks of Texas fever in this country are rare and unimportant, and the insurance on export cattle has been reduced to 1 per cent or less.

These are only a small part of the results accomplished by the Bureau of Animal Industry through this kind of experimentation. Such researches are difficult, and they are only successfully conducted where the conditions are favorable and where

the investigators are stimulated by friendly encouragement and support. It may be safely said that under hostile legislation, classifying such experiments as a form of cruelty, surrounding them with numerous limitations and restrictions, subjecting the experimenter to the espionage of intolerant inspectors and threatening him with excessive penalties for infractions of any of the many requirements, the success which we now point to with pride would not have been achieved.

There are still many problems relating to animal diseases which must be investigated and solved by this class of experiments before the animal industry can yield to our farmers an adequate return. Agriculture demands and should receive all the assistance which can be given to it by the most advanced scientific methods employed under the most favorable conditions. We find to-day many of the dairy herds affected to the extent of 70 to 90 per cent with tuberculosis; we find the swine fed upon the refuse milk of such dairies affected with the same disease, and we have every reason to believe that much of the tuberculosis in people comes from the same source. Is the Bureau of Animal Industry to be interrupted and hampered in its study of this and other diseases by legislation alleged to be for the prevention of cruelty to animals when the promoters of this legislation have failed to show that any improper experimentation has been conducted or is likely to be conducted in the District of Columbia?

Are the vital interests of agriculture in the whole United States to be made subservient to the demands of an over-zealous and intolerant local society, which appears incapable of taking a broad and liberal view of this subject? Are we prepared, in order to protect a few dogs, cats, and other animals, from sufferings less than these animals usually undergo when they die a so-called natural death, to have legislation enacted which would withdraw the efforts of the scientists who are working for the relief of the hundreds of thousands of men, women, and children who now die annually in this country from preventable diseases? Are the millions of animals which suffer and die from animal plagues every year less worthy of attention than the few which die with less pain in the research laboratory? These questions appear not to have occurred to those who are advocating this legislation. The effort to limit, obstruct, and prohibit such experiments, although it originates from humane societies, is not in the cause of true humanity. It ignores the interests and sufferings of mankind and would perpetuate these sufferings to carry into effect what is clearly an erroneous view of what constitutes kindness and humanity to the lower animals.

If the legislation already enacted for the prevention of cruelty to animals in the District of Columbia is shown to be insufficient for this purpose, and additional legislation is thought desirable, this legislation should be so framed as not to affect the Executive Departments of the United States Government, and under no circumstances should local legislation be allowed to interfere with, demoralize or prohibit the important scientific investigations which are specifically authorized by Congress for the benefit of the great agricultural industry of the whole country.

Agriculture at this time needs the encouragement and assistance which the experimental work of the Bureau of Animal Industry is bringing to it. Much has already been accomplished, but even greater results are promised in the near future. It is an age of science and progress, and all other industries are rapidly advancing through scientific research. Should not our farmers receive all possible aid from the same source?

Very respectfully,

CHAS. W. DABNEY, JR.,
Acting Secretary.